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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,230

01/10/2006

Helmut Jerg

2003P00937WOUS

7445

46726

7590

02/26/2009

BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

OSTERHOUT, BENJAMIN LEE

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

02/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,230	Applicant(s) JERG ET AL.	
	Examiner BENJAMIN OSTERHOUT	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☒ Claim(s) 10 (second claim 10) is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060110</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).
2. Misnumbered claim 10 (the second claim 10) has been renumbered 12. Claims 13-14 and 16-18 are considered to be dependent upon claim 12. Claim 15 is considered to be dependent upon claim 14. Claim 11 is considered to be dependent upon claim 10 (the first claim 10).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 11, 12, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claims 11 and 12, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and

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bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 11 recites the broad recitation "during a partial program step 'drying' on the one hand", and the claim also recites "on the other hand preferably during a partial program step using rinsing liquid to be heated" which is the narrower statement of the range/limitation. Claim 12 recites the broad recitation "an outlet with a pipe to the sorption column", and the claim also recites "wherein said pipe preferably has a check valve and then in the direction of flow preferably an inlet valve to the ambient air" which is the narrower statement of the range/limitation.

6. Regarding claim 18, the phrase "e.g." renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication No. 358279 A1 to Fried et al.

9. Regarding claim 10, Fried et al. discloses a dishwasher with a rinsing container (Fig 1, part 1); a spraying system using rinsing water (not shown in the Figures; machine translation, page 2, ll. 5-6, "A rinsing container..."); and a double walled drying container connected outside of the rinsing container, the container filled with a desiccant that is reversibly dehydratable (machine translation, page 2, ll. 6-8, "Around the instantaneous..."; machine translation, page 1, ll. 5, "regeneratable by heating..."), air is circulated through the dishwasher wherein the dry air takes up moisture and is dried again by the drying container (machine translation, page 2, ll. 15-18, "In the drying container...") which the drying step is indicated to occur after some rinsing step (machine translation, page 1, ll. 8-9, "Afterwards the hot rinsing..."), and the heating element which dries the desiccant is also used to heat the rinsing water (machine translation, page 2, ll. 6-8, "Around the instantaneous..."; machine translation, page 2, ll. 21-23, "With the next start-up..."); see also Fig. 2, parts 7 and 3, drying container and instantaneous water heater respectively).

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10. Regarding claim 11, Fried et al. teaches that during a drying step air is circulated from the rinsing container to the drying container and back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container..."). The "preferably" type language used in the claim has not been given patentable weight; see above rejection under 35 U.S.C. 112.

11. Regarding claim 12, Fried et al. teaches the steps of washing the dishes with detergent, rinsing with water, and then drying the dishes (machine translation, page 1, ll. 7-9, "After conclusion of this.."). Furthermore, Fried et al. teaches that during the drying step air is circulated from the dishwasher to the drying container, through the desiccant which is reversibly dehydratable, and back to the dishwasher (machine translation, page 2, ll. 15-18, "In the drying container..."; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the drying container and desiccant are subjected to a heating step wherein desorption occurs and the heated water recovered is used as rinsing water (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the rinsing container has an outlet pipe to the drying container (see Fig. 1, the pipe not labeled running between parts 14 and 13). Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container..."). Fried et al. also teaches that the outlet pipe has a fan to suck in air from the rinsing container located just before the drying container and desiccant

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(see Fig. 1, part 13; machine translation, page 2, ll. 9-10, "Over the terminal..."; machine translation, page 2, ll. 14-15, "Now if the fan 13..."). The "preferably" type language used in the claim has not been given patentable weight; see above rejection under 35 U.S.C. 112.

12. Regarding claim 13, Fried et al. teaches a double walled drying container filled with desiccant (machine translation, page 2, ll. 6-8, "Around the instantaneous...") that is capable of being renewed by the heater thereby giving up moisture for the next rinsing cycle (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating..."). This claim is treated as though it depends from claim 12.

13. Regarding claims 14-15, Fried et al. teaches that the electric heater is preferably an electric instantaneous water heater (machine translation, page 1, ll. 3) and that the heater is located in the pipe which goes to the drying container, more so Fried et al. teaches that the electric heater is surrounded by the drying container with desiccant (see Fig. 2, parts 3 and 7; machine translation, page 2, ll. 6-7, "Around the instantaneous..."). These claims are treated as though they depend from claim 12.

14. Regarding claim 16, Fried et al. may not teach that the air that exits the inlet pipe (blow-out port, Fig. 1, part 9) is cooled. However, basic thermodynamics teaches that as an adiabatic gas expands, it cools. When the air exits the pipe, it will naturally cool.

15. Regarding claim 17, Fried et al. teaches that the inlet pipe (blow-out port, Fig 1, part 9) extends up into the rinsing container and has a cap-like cover (Fig. 1, part 10) to

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keep out water (see Fig 1, part 9 and 10; machine translation, page 1, ll. 48-52, "Since the air circulations..."). This claim is treated as though it depends from claim 12.

16. Regarding claim 18, Fried et al. teaches that the mechanism for heating is that of a latent heat storage (machine translation, page 1, ll. 20-21, "To the avoidance...") wherein the water desorbed from the desiccant is heated and reused as rinsing water (machine translation, page 2, ll. 21-23, "With the next start-up..."). This claim is treated as though it depends from claim 12.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

19. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application Publication No. 358279 A1 to Fried et al. in view of U.S. Patent No. 5,343,632 to Dinh.

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20. Regarding claim 16, Fried et al. is relied upon as above in claim 12. Fried et al. may not teach that the air introduced into the washing container via the inlet is cooled.

21. Dinh teaches a closed-loop drying system (col. 3, ll. 13-15) which may be used in a dishwasher (col. 8, ll. 8-10) wherein a cooler/condenser (col. 7, ll. 32-36) is used to cool the humid air in order to further remove moisture from the air before the air is recirculated (col. 7, ll. 58-66).

22. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dishwasher drying system of Fried et al. with the cooler/condenser of Dinh in order to cool the air so that even more moisture may be removed from the air before it is recirculated.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN OSTERHOUT whose telephone number is (571)270-7379. The examiner can normally be reached on Monday-Thursday 8:30am-3:30pm.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1792

/BLO/

Benjamin L. Osterhout
19 February 2008